

**Amendments to the Claims:**

- 1 1. (previously presented) A method of efficiently transmitting media information  
2 associated with two or more concurrent calls carried in a packet-switched network, the  
3 method comprising the computer-implemented steps of:  
4 aggregating two or more media packets from the two or more concurrent calls  
5 originating from one or more source end points into an aggregated media  
6 payload;  
7 re-packetizing the aggregated media payload using a single aggregated header to form  
8 an aggregated media packet;  
9 forwarding the aggregated media packet to a next hop in the packet-switched network  
10 in response to either one of  
11 (a) a timer reaching a non-zero maximum allowed delay time value, or  
12 (b) the aggregated media packet containing a specified number of Real-Time  
13 Protocol segments, wherein the specified number is variable according  
14 to user input.
- 1 2. (currently amended) The method of Claim [[1]] 15, further comprising de-aggregating  
2 the aggregated media payload for one or more destination endpoints by separating the  
3 aggregated media payload to result in creating and sending restored copies of the two  
4 or more media packets, wherein each media packet corresponds to one of the two or  
5 more concurrent calls.

1 3. (currently amended) The method of Claim [[1]] 15, wherein aggregating the two or  
2 more media packets comprises compressing one or more headers of each media  
3 packet.

1 4. (original) The method of Claim 1, wherein the two or more media packets are Real-  
2 Time Protocol (RTP) packets.

1 5. (currently amended) The method of Claim [[4]] 15, wherein the step of aggregating  
2 two or more media packets further comprises the steps of:  
3 compressing an IP header and a UDP header of each RTP packet to form a  
4 corresponding uncompressed RTP segment; and  
5 encapsulating the two or more uncompressed RTP segments with the single  
6 aggregated header.

1 6. (currently amended) The method of Claim [[4]] 21, wherein the step of aggregating  
2 two or more media packets further comprises the steps of:  
3 compressing an IP header, a UDP header, and an RTP header of each RTP packet to  
4 form a corresponding compressed RTP segment; and  
5 encapsulating the two or more compressed RTP segments with the single aggregated  
6 header.

1 7. (previously presented) The method of Claim 1, wherein the step of aggregating the  
2 two or more media packets further comprises forming the aggregated media payload  
3 according to an aggregation protocol for aggregating the two or more media packets.

1 8. (currently amended) The method of Claim [[7]] 15, wherein the aggregation protocol  
2 comprises forming the aggregated media payload based on an aggregated media  
3 packet format for each aggregated media packet wherein the aggregated media packet  
4 format comprises a version field indicating a version of the aggregation protocol.

1 9. (currently amended) The method of Claim [[7]] 15, wherein the aggregation protocol  
2 comprises forming the aggregated media payload based on an aggregated media  
3 packet format for each aggregated media packet wherein the aggregated media packet  
4 format comprises a placeholder field that reserves packet space for future use.

1 10. (currently amended) The method of Claim [[7]] 15, wherein the aggregation protocol  
2 comprises forming the aggregated media payload based on an aggregated media  
3 packet format for each aggregated media packet wherein the aggregated media packet  
4 format comprises a sequence number field that is incremented for each aggregated  
5 media packet and is used to detect media packet loss.

1 11. (currently amended) The method of Claim [[7]] 15, wherein the aggregation protocol  
2 comprises forming the aggregated media payload based on an aggregated media  
3 packet format for each aggregated media packet wherein the aggregated media packet  
4 format comprises a trunk ID field that uniquely identifies a corresponding trunk.

1 12. (currently amended) The method of Claim [[7]] 15, wherein the aggregation protocol  
2 further comprises forming the aggregated media payload based on an uncompressed  
3 Real-Time Protocol segment format for each uncompressed Real-Time Protocol

4 segment of the two or more media packets that comprises a context ID field indicating  
5 a session context ID for the uncompressed Real-Time Protocol segment.

1 13. (currently amended) The method of Claim [[7]] 15, wherein the aggregation protocol  
2 further comprises forming the aggregated media payload based on an uncompressed  
3 Real-Time Protocol segment format for each uncompressed Real-Time Protocol  
4 segment of the two or more media packets that comprises a compression bit indicating  
5 whether the uncompressed Real-Time Protocol segment is uncompressed.

1 14. (currently amended) The method of Claim [[7]] 15, wherein the aggregation protocol  
2 further comprises forming the aggregated media payload based on an uncompressed  
3 Real-Time Protocol segment format for each uncompressed Real-Time Protocol  
4 segment of the two or more media packets that comprises a placeholder field for  
5 future use.

1 15. (currently amended) A method of efficiently transmitting media information  
2 associated with two or more concurrent calls carried in a packet-switched network, the  
3 method comprising the computer-implemented steps of:  
4 aggregating, according to an aggregation protocol, two or more media packets from  
5 the two or more concurrent calls originating from one or more source end  
6 points into an aggregated media payload;  
7 re-packetizing the aggregated media payload using a single aggregated header to form  
8 an aggregated media packet;  
9 forwarding the aggregated media packet to a next hop in the packet-switched network;  
10 wherein the aggregation protocol further comprises forming the aggregated media  
11 payload based on an uncompressed Real-Time Protocol segment format for

each uncompressed Real-Time Protocol segment of the two or more media packets, ~~that~~ wherein the aggregated media payload comprises a Real-Time Protocol header extension bit indicating whether a Real-Time Protocol header extension appears in the uncompressed Real-Time Protocol segment.

16. (currently amended) The method of Claim [[7]] 15, wherein the aggregation protocol further comprises forming the aggregated media payload based on an uncompressed Real-Time Protocol segment format for each uncompressed Real-Time Protocol segment of the two or more media packets that includes a full length field containing a length of a Real-Time Protocol packet that corresponds to the uncompressed Real-Time Protocol segment.

17. (currently amended) The method of Claim [[7]] 15, wherein the aggregation protocol further comprises forming the aggregated media payload based on an uncompressed Real-Time Protocol segment format for each uncompressed Real-Time Protocol segment of the two or more media packets that comprises a Real-Time Protocol payload and a Real-Time Protocol header corresponding to a Real-Time Protocol packet that in turn corresponds to the uncompressed Real-Time Protocol segment.

18. (currently amended) The method of Claim [[7]] 15, wherein the aggregation protocol further comprises forming the aggregated media payload based on an uncompressed Real-Time Protocol segment format for each uncompressed Real-Time Protocol segment of the two or more media packets that comprises a padding field that aligns an end of the uncompressed Real-Time Protocol segment with a next four-byte boundary.

1 19. (currently amended) The method of Claim [[7]] 21, wherein the aggregation protocol  
2 further comprises forming the aggregated media payload based on a compressed Real-  
3 Time Protocol segment format for each compressed Real-Time Protocol segment of  
4 the two or more media packets that comprises a context ID field indicating a session  
5 context ID for the compressed Real-Time Protocol segment.

1 20. (currently amended) The method of Claim [[7]] 21, wherein the aggregation protocol  
2 further comprises forming the aggregated media payload based on a compressed Real-  
3 Time Protocol segment format for each compressed Real-Time Protocol segment of  
4 the two or more media packets that comprises a compression bit indicating whether  
5 the Real-Time Protocol segment is compressed.

1 21. (currently amended) A method of efficiently transmitting media information  
2 associated with two or more concurrent calls carried in a packet-switched network, the  
3 method comprising the computer-implemented steps of:  
4 aggregating, according to an aggregation protocol, two or more media packets from  
5 the two or more concurrent calls originating from one or more source end  
6 points into an aggregated media payload;  
7 re-packetizing the aggregated media payload using a single aggregated header to form  
8 an aggregated media packet;  
9 forwarding the aggregated media packet to a next hop in the packet-switched network;  
10 wherein the aggregation protocol further comprises forming the aggregated media  
11 payload based on a compressed Real-Time Protocol segment format for each  
12 compressed Real-Time Protocol segment of the two or more media packets,  
13 ~~that~~ wherein the aggregated media payload comprises a Real-Time Protocol

14 header extension bit indicating whether a Real-Time Protocol header extension  
15 appears in the compressed Real-Time Protocol segment.

1 22. (currently amended) The method of Claim [[7]] 21, wherein the aggregation protocol  
2 further comprises forming the aggregated media payload based on a compressed Real-  
3 Time Protocol segment format for each compressed Real-Time Protocol segment of  
4 the two or more media packets that comprises a Real-Time Protocol header marker  
5 bit.

1 23. (currently amended) The method of Claim [[7]] 21, wherein the aggregation protocol  
2 further comprises forming the aggregated media payload based on a compressed Real-  
3 Time Protocol segment format for each compressed Real-Time Protocol segment of  
4 the two or more media packets that comprises a length field containing a length of a  
5 Real-Time Protocol payload of a Real-Time Protocol packet of the compressed Real-  
6 Time Protocol segment.

1 24. (currently amended) The method of Claim [[7]] 21, wherein the aggregation protocol  
2 further comprises forming the aggregated media payload based on a compressed Real-  
3 Time Protocol segment format for each compressed Real-Time Protocol segment of  
4 the two or more media packets that comprises a sequence number field carrying a  
5 Real-Time Protocol header sequence number.

1 25. (currently amended) The method of Claim [[7]] 21, wherein the aggregation protocol  
2 further comprises forming the aggregated media payload based on a compressed Real-  
3 Time Protocol segment format for each compressed Real-Time Protocol segment

4 wherein the compressed Real-Time Protocol segment format comprises a timestamp  
5 field carrying a Real-Time Protocol header timestamp.

1 26. (original) The method of Claim 7, wherein the aggregation protocol further comprises  
2 forming the aggregated media payload based on a compressed Real-Time Protocol  
3 segment format for each compressed Real-Time Protocol segment of the two or more  
4 media packets that comprises a Real-Time Protocol payload of a Real-Time Protocol  
5 packet that corresponds to the compressed Real-Time Protocol segment.

1 27. (currently amended) The method of Claim [[7]] 21, wherein the aggregation protocol  
2 further comprises forming the aggregated media payload based on a compressed Real-  
3 Time Protocol segment format for each compressed Real-Time Protocol segment of  
4 the two or more media packets that comprises a padding field that aligns an end of the  
5 compressed Real-Time Protocol segment with a next boundary.

1 28. (original) The method of Claim 1, wherein the two or more media packets are  
2 received while traversing a common sub-route.

1 29. (canceled)

1 30. (canceled)

1 31. (previously presented) A method of efficiently transmitting media information  
2 associated with two or more concurrent calls carried in a packet-switched network, the  
3 method comprising the computer-implemented steps of:



4 aggregating two or more media packets from the two or more concurrent calls  
5 originating from one or more source end points into an aggregated media  
6 payload;  
7 re-packetizing the aggregated media payload using a single aggregated header to form  
8 an aggregated media packet;  
9 forwarding the aggregated media packet to a next hop in the packet-switched network  
10 when a non-zero maximum allowed delay time value is reached.

1 32. (previously presented) The method of Claim 1, further comprising:  
2 using the maximum allowed delay time value for forwarding the aggregated media  
3 packet;  
4 starting a count down for the maximum allowed delay time value when a first media  
5 packet arrives for aggregation; and  
6 aggregating subsequent media packets that arrive before the maximum allowed delay  
7 time value is reached.

1 33. (previously presented) An apparatus for transmitting media information associated  
2 with two or more concurrent calls carried in a packet-switched network, the apparatus  
3 comprising:  
4 means for aggregating two or more media packets from one or more source endpoints  
5 into an aggregated media payload;  
6 means for re-packetizing the aggregated media payload using a single aggregated  
7 header to form an aggregated media packet; and  
8 means for forwarding the aggregated media packet to a next hop in the packet-  
9 switched network in response to either one of

- 10 (a) a timer reaching a non-zero maximum allowed delay time value, or  
11 (b) the aggregated media packet containing a specified number of Real-Time  
12 Protocol segments, wherein the specified number is variable according  
13 to user input.

- 1 34. (previously presented) An apparatus for transmitting media information associated  
2 with two or more concurrent calls carried in a packet-switched network, the apparatus  
3 comprising:  
4 one or more processors coupled to an aggregator for aggregating two or more media  
5 packets into an aggregated media packet;  
6 a memory accessible to the one or more processors; and  
7 one or more sequences of instructions stored in the memory which, when executed by  
8 the one or more processors, cause the one or more processors to carry out the  
9 steps of:  
10 aggregating two or more media packets from one or more source endpoints  
11 into an aggregated media payload;  
12 re-packetizing the aggregated media payload using a single aggregated header  
13 to form the aggregated media packet; and  
14 forwarding the aggregated media packet to a next hop in the packet-switched  
15 network in response to either one of  
16 (a) a timer reaching a non-zero maximum allowed delay time value, or  
17 (b) the aggregated media packet containing a specified number of Real-  
18 Time Protocol segments, wherein the specified number is  
19 variable according to user input.

1     35.     (previously presented) A computer-readable medium comprising one or more  
2             sequences of instructions for efficiently transmitting media information associated  
3             with two or more concurrent calls carried in a packet-switched network, which the  
4             sequences of instructions, when executed by one or more processors, cause the one or  
5             more processors to carry out the steps of:  
6             aggregating two or more media packets from the two or more concurrent calls  
7                     originating from one or more source end points into an aggregated media  
8                     payload;  
9             re-packetizing the aggregated media payload using a single aggregated header to form  
10                     an aggregated media packet;  
11             forwarding the aggregated media packet to a next hop in the packet-switched network  
12                     in response to either one of  
13                     (a) a timer reaching a non-zero maximum allowed delay time value, or  
14                     (b) the aggregated media packet containing a specified number of Real-Time  
15                     Protocol segments, wherein the specified number is variable according  
16                     to user input.